

06- DEPARTMENT OF ENVIRONMENTAL PROTECTION

096 BUREAU OF AIR QUALITY CONTROL

CHAPTER 112: BULK TERMINAL PETROLEUM LIQUID TRANSFER REQUIREMENTS

SUMMARY: This regulation requires bulk gasoline terminals loading tank trucks or trailers and who dispense 20,000 gallons or more of gasoline per day to install a vapor control system and requires tank truck tightness certification. This system must control gasoline vapors so that not more than 35 milligrams of vapor escapes for each liter of gasoline transferred.

1. Scope

A. This regulation applies to all ambient air quality control regions of the State of Maine.

B. This regulation shall apply to all bulk gasoline terminals that have a daily throughput of gasoline of 20,000 gallons or more and the appurtenant equipment necessary to load tank trucks or trailer compartments. Once a bulk gasoline terminal exceeds a daily throughput of 20,000 gallons or more of gasoline, the requirements of this regulation shall always apply. Bulk gasoline terminals built or modified after December 17, 1980 are subject to New Source Performance Standards as defined in 40 CFR, Part 60, Subpart XX.

2. Definitions

A. Loading rack. "Loading rack" means the loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves necessary to fill gasoline tank trucks at bulk gasoline terminals.

3. Prohibition.

No owner or operator of any bulk gasoline terminal may permit or suffer gasoline to be loaded into any tank trucks or trailer unless:

A. The tank truck or trailer has been certified within the last 12 months as vapor-tight pursuant to Chapter 120 of the Department's regulations.

B. The bulk gasoline terminal is equipped to vent all displaced vapors and gases only to a vapor control system that has been properly installed and which is maintained in good working order, and which must be in operation at all times gasoline is being transferred to tank trucks from the storage tanks. This vapor control system shall consist of the following:

1. An absorber/adsorption unit or condensation system which processes and recovers all vapors and gases from the equipment being controlled such that mass emissions of volatile organic compounds do not exceed 35 milligrams per liter of gasoline transferred; or
2. A vapor collection system which directs all vapors to a fuel gas system, such as a thermal oxidizer; or
3. Any other compliance plan that has express written approval by the Commissioner and the United States Environmental Protection Agency.

C. A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected. There shall be no liquid drainage from the loading device.

D. All loading and vapor lines are equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

E. The pressure in the vapor collection system is not allowed to exceed the tank truck or trailer pressure relief settings.

Gasoline dispensing facilities and bulk gasoline terminals may not allow gasoline to be discarded in sewers or stored in open containers. Gasoline dispensing facilities and bulk gasoline terminals may not allow gasoline to be handled in any manner that would result in evaporation.

4. Emission Standard

A. As of the effective date of the 1995 amendment to this Chapter, no owner or operator of any bulk terminal shall allow the mass emissions of volatile organic compounds from such terminals to exceed the emission limit of 80 milligrams per liter of gasoline transferred.

B. As of August 31, 1996, no owner or operator of any bulk gasoline terminal shall allow the mass emissions of volatile organic compounds from such terminal to exceed the emission limit of 35 milligrams per liter of gasoline transferred.

5. Compliance Schedule

Final compliance with the 35 milligrams per liter of gasoline transferred emissions limit shall be achieved before August 31, 1996.

6. Emission Testing.

Compliance with this standard shall be determined by methods promulgated in 40 Code of Federal Regulations, Part 60.503 or other methods approved by the Commissioner and the United States Environmental Protection Agency.

BASIS STATEMENT : Gasoline is a hydrocarbon vapor that aids the formation of ozone in the atmosphere. It is necessary to control such hydrocarbon vapors present in the atmosphere, because Maine is violating the federal ozone ambient air quality standard. This regulation controls the maximum amount of gasoline emission so to reduce the ozone formed.

BASIS STATEMENT FOR AMENDMENT OF OCTOBER 14, 1981 : Public Law 1981, Chapter 441, authorized the Board of Environmental Protection with the consent of the United States Environmental Protection Agency to modify the compliance schedule of 38 M.R.S.A., Section 610, "as the public interest requires to afford equitable treatment to bulk gasoline terminals in the Central Maine and Downeast Air Quality Control Regions." Upon Petition for Rulemaking by Irving Oil Corporation of Searsport the Board concluded that Regulation, Chapter 112 does not apply in Searsport because imposing expensive emission controls on Irving is inequitable as long as nearby terminals in the Downeast Air Quality Control Region with which the Searsport terminal competes are not equipped with VOC controls.

BASIS STATEMENT FOR AMENDMENT OF JUNE 26, 1986 : The United States Environmental Protection Agency promulgated test methods and procedures for volatile organic compound emissions from bulk gasoline terminals. This regulation change updates the emission testing procedure provisions of this regulation to the federally approved method.

BASIS STATEMENT FOR AMENDMENT OF AUGUST 10, 1988 : This amendment expanded the scope of the regulation to include all Ambient Air Quality Control Regions. Uncontrolled gasoline storage terminals in Downeast and Central Maine Air Quality Control Regions have been estimated as emitting over 800 tons of hydrocarbons annually. The use of floating roofs and vapor control systems (Chapters 111 and 112) for bulk gasoline terminals is considered Best Practical Treatment and will reduce emissions by about 94 percent.

BASIS STATEMENT FOR AMENDMENT OF SEPTEMBER 27, 1989 : This amendment corrected certain minor deficiencies identified by the U.S. Environmental Protection Agency in the State Implementation Plan (SIP) and for consistency with State statute. The U.S.

Environmental Protection Agency commented that there should be no cut-off exemption of 3500 gallons for tank trucks as the original SIP includes all tank trucks. The Department believes the 3500 gallon capacity cut-off is appropriate. There are only a minimum number of trucks under the 3500 gallon capacity which pick up gasoline at the bulk gasoline terminals. Therefore the environmental impact is deemed insignificant.

BASIS STATEMENT FOR AMENDMENT OF SEPTEMBER 26, 1990 : During the 114th Session of the Maine Legislature, the Board of Environmental Protection was given the authority under 38 M.R.S.A. 585 and 585-A to establish and amend emission standards and regulations to implement ambient air quality standards and emission standards. This rule was amended to reflect the new authority under statute. No request for public hearing nor comments were received on the reauthorization.

BASIS STATEMENT FOR AMENDMENT OF MAY 22, 1991 : This amendment corrected certain minor deficiencies identified by the Environmental Protection Agency in the State Implementation Plan (SIP). The U. S. Environmental Protection Agency commented that since the State has opted to retain the tank truck cutoff exemption of 3500 gallons or less, a demonstration must be made to show that those trucks account for less than 0.8 percent of the gasoline throughput in the State. A survey was conducted that sufficiently met that criteria. The U. S. EPA also commented that the "tank truck" definition need clarification that the exemption applied to trucks with a total truck capacity of less than 3500 gallons and that after this date any additional trucks added to the fleet not be exempted from VOC Control requirements.

Finally, the EPA had identified a problem with the effective dates that caused confusion over control requirements at certain facilities, which was corrected in this amendment.

BASIS STATEMENT FOR AMENDMENT OF JUNE 22, 1994 : This amendment removes the definitions bulk gasoline terminal, gasoline, tank truck, and vapor control system from this chapter and relocates them to Chapter 100, Definitions since these apply to more than just Chapter 112.

In addition to the Basis Statement above, the Department has filed with the Secretary of State its responses to comments received during the public comment period.

BASIS STATEMENT FOR AMENDMENT OF JULY 19, 1995 : This amendment lowers allowable emissions of VOCs from 80 milligrams per liter to 35 milligrams per liter as a control strategy in Maine's 15% Reasonable Further Progress plan. Only one terminal operator presented testimony in opposition to this new emission limit. In response to concerns regarding the compliance deadline the Department moved the deadline back to August 31, 1996. Several other minor changes were enacted to clarify provisions of the rule.

AUTHORITY: 38 M.R.S.A., Section 585, 585-A

EFFECTIVE DATE: May 7, 1979

Amended: December 26, 1981

Amended: June 26, 1986

Amended: September 21, 1988

Amended: October 3, 1989

Amended: November 3, 1990

Amended: June 9, 1991

Amended: July 11, 1994

Amended: July 25, 1995